

P-USINOR-002/WO

CLAIMS

1. An installation for the continuous casting of metals, particularly steel, in which the submerged nozzle (8), via which the molten metal to be cast arrives in the mold from a tundish located thereabove, is surrounded by an annular electromagnetic inductor (1) having a magnetic field that rotates about the casting axis and is intended to force the molten metal to rotate axially therewith, said inductor (1) being of the polyphase traversing-magnetic-field type, which inductor is provided with a pair of poles (3) per phase and each pole (3) of which is formed by an electrical winding (6) wound around an inwardly salient pole tooth (3) that terminates in a pole face (4) placed facing the nozzle (8), the pole teeth being connected together by an outer peripheral magnetic yoke (5a, 5b) for closing the magnetic flux, said installation being characterized in that each pole tooth (3) has, at the end of its salient part, a lateral taper (12) that increases the distance by which the pole faces (4) are separated from one another.

2. The continuous casting installation as claimed in claim 1, characterized in that the submerged nozzle (8) is a nozzle with lateral outlets.

3. The continuous casting installation as claimed in claim 1, characterized in that the inductor (1) includes, on its inner periphery, a heat shield (7) surrounding the nozzle at some distance therefrom.

4. The continuous casting installation as claimed in claim 1, characterized in that the annular inductor (1) is formed from two pivoting articulated half-shells (2a, 2b).

5. The continuous casting installation as claimed in claim 1, characterized in that it further includes a resonant electrical circuit in which the

inductor is connected in series with an adjustable capacitor.

- 5 6. The continuous casting installation as claimed in claim 4, characterized in that the inductor (1) is mounted on the end of support arms (9) for keeping it in position, these support arms being retractable and provided with controlled means (11) that actuate each half-shell (2a, 2b) so that they pivot.